National Park Service
U.S. Department of the Interior

Cuyahoga Valley National Park
Brecksville, Ohio

Cuyahoga Valley National Park White-Tailed Deer Management Plan

Photo courtesy of Tom Jones

Environmental Impact Statement

Public Scoping Meetings

National Park Service
U.S. Department of the Interior
Cuyahoga Valley National Park
15610 Vaughn Road
Brecksville, OH 44141

You're Invited!

Your Participation Will Help Shape This Plan

Because of your interest in Cuyahoga Valley National Park, we are requesting your input in developing the White-tailed Deer Management Plan/Environmental Impact Statement (EIS). Your participation is vital to our planning process. There are a number of ways to be involved:

- Attend a public scoping meeting
- Submit written comments by mail to:
  Science and Resource Management
  Cuyahoga Valley National Park
  15610 Vaughn Road
  Brecksville, OH 44141
- Submit comments electronically to:
  http://parkplanning.nps.gov/cuva

Please be sure to include your full name and address with the comments so we may add you to our mailing list for information on future items during this process. Updates on the Plan/EIS will be provided at www.nps.gov/cuva.

Public Scoping Meetings

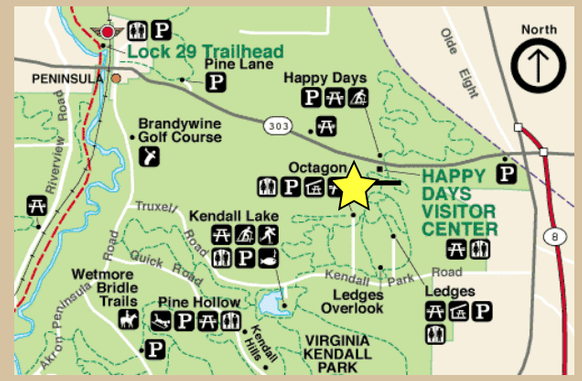
Scoping is the first step to involve the public in the environmental impact analysis process. Scoping includes holding meetings and providing opportunities for the public to comment so that their concerns are identified early and the analysis is focused on important issues. Because the Plan/EIS will analyze many complex ecological and social issues, your participation is encouraged and needed.

Public Scoping Meetings Schedule

Wednesday, Oct 11, 2006; 6:00 pm to 8:00 pm
Thursday, Oct 12, 2006; 2:00 pm to 4:00 pm
Thursday, Oct 12, 2006; 6:00 pm to 8:00 pm

Public Scoping Meetings Location

All meetings will be held at the Happy Days Visitor Center, which is conveniently located on State Route 303 about 1 mile west of State Route 8 in Boston Heights, Ohio (2 miles east of Peninsula).



NEPA and Where We Are in the Process

NPS is preparing an EIS in accordance with the National Environmental Policy Act (NEPA), which requires federal agencies to analyze impacts to the natural and human environment for any major federal actions, such as the development of this plan. The following highlights important steps in the NEPA process:

- Notice of Intent for Plan/EIS Published
- ☆ Public Scoping—We Are Here ☆
- 60-day Public Scoping and Comment Period
- NPS Reviews Public Scoping Comments, Gathers Data, and Prepares Draft Plan/EIS
- Release Draft Plan/EIS to Public for Review
- 60-day Public Review and Comment Period
- Public Meetings on Draft Plan/EIS
- Final Plan/EIS and Record of Decision

Purpose of and Need for Taking Action

The purpose of this plan/EIS is to develop a white-tailed deer management plan that supports long-term protection, preservation, and restoration of native species and other park resources. A plan is needed to ensure that:

- Deer do not become the dominant force in the ecosystem adversely impacting forest regeneration, sensitive vegetation and other wildlife.
- Natural distribution, abundance, and diversity of plant and animal species do not continue to be adversely affected by the large number of white-tailed deer in Cuyahoga Valley National Park.
- Declining forest regeneration is addressed and deer browsing does not continue at a level that eliminates or reduces forest regeneration, and that adverse changes to wildlife habitat and forest structure and composition do not occur over time.
- The park's cultural landscape preservation goals and mandates are not compromised by the large number of white-tailed deer in Cuyahoga Valley National Park.
- The protection of park resources and values benefits from coordination with other jurisdictional entities currently implementing deer management actions.

Preliminary Alternative Management Strategies

The following represent preliminary alternative strategies for deer management in the park:

- Existing Management Continued (No-Action Alternative)
- Habitat Management
- Fencing
- Reproductive Control
- Direct Reduction (sharpshooting and/or capture and euthanasia)
- Combined Management

Sustaining Forest Regeneration: A White-tailed Deer Management Plan at Cuyahoga Valley National Park

The National Park Service (NPS) will soon begin preparation of the White-tailed Deer Management Plan and EIS for Cuyahoga Valley National Park. An EIS is a document that analyzes potential adverse and beneficial impacts of an action. This EIS will analyze environmental impacts of options for managing deer impacts on native vegetation and forest regeneration processes. In developing this plan, the NPS seeks to promote natural ecosystems and to protect native vegetation and forest regeneration.

Forest Regeneration: The regrowth of forest species and renewal of forest tree cover such that the natural forest sustains itself without human intervention.

History of Deer Monitoring in Cuyahoga Valley National Park

Within eastern national parks, such as Cuyahoga Valley National Park, landscapes have been managed to allow for the preservation and rehabilitation of natural, scenic, and historic lands. The result is a mixture of forest, shrub, and grassland, which constitutes excellent habitat for white-tailed deer. Since deer harvest has not traditionally been a component of management activities in the majority of parks, including Cuyahoga Valley National Park, the population of deer has greatly increased.

A deer browse line is evidence of deer impacts to vegetation.

Recent density estimates by park staff indicate as many as 130 deer per square mile. Scientists have established that high deer numbers can have negative effects on plant and animal species.

Since 1990, deer population growth, density, and health at Cuyahoga Valley National Park have been measured through roadside spotlight surveys and distance sampling, aerial surveys, fecal pellet group surveys, dead deer surveys, and a herd health study. The park has also conducted studies to determine the impact of deer on natural resources, including vegetation and other wildlife. Vegetation studies conducted to date include fenced plot studies of deer browse on large-flowered trillium and general forest vegetation. In terms of wildlife studies, a forest songbird study was conducted to examine cascading effects of deer density and browse on bird abundance and diversity.

Park Research and Findings

Research on deer impacts suggests that trillium (a native wildflower) can provide a good indication of deer impacts in forests because it is a species that deer prefer to eat and it is able to flower only if stems reach 12-14 centimeters (about 5 inches) in height. To measure deer impact on trillium, 26 small cages, called exclosures, were placed to protect plants from deer. Each year, these exclosures are compared with adjacent open "control" areas in 14 locations throughout the park. During the trillium growing season, stem heights and flowering are measured every two weeks.

A greater number of flowers occur in fenced areas versus control areas because trillium are able to reach a stem height that allows plants to flower.

The exclosure shown above is used to measure deer impact on large-flowered trillium.

To study deer impacts on other types of vegetation, larger fenced exclosures were paired with open plots at sites in various park habitats. In the forest habitat, measurements taken after three growing seasons indicated improvements in the amount of groundcover and taller seedlings and better growth of black cherry within the exclosures. The use of exclosures allows a better understanding of vegetation impacts that are directly attributable to deer.

Results of a four-year study of forest birds indicated that in areas where deer density was relatively high and less understory foliage was present, numbers of nesting bird species were reduced by as much as 60% compared to areas of low deer density and greater foliage cover.

Monitoring and assessment of deer populations and plant communities, such as those described above, will continue to provide critical information to the park over time to better understand any impacts of deer populations on park resources, and allow for adaptive management of deer-related impacts.